May14-10 Weekly Report

MicroCART 2013-2014

Week 13: November 18-November 24, 2013

Advisors: Nicola Elia & Phillip Jones

Name	Weekly Hours	Running Hourly Total
Kevin Engel	4	72
Nathan Ferris	7	66
William Franey	9	71
Michael Johnson	6	76
Kelsey Moore	7	86
Lucas Mulkey	5	72
Aaron Peterson	4	64

Weekly objectives

Completed Objectives:

Collected sensor data

Next Week Goals:

- Finish our 491 website which is due somewhat soon
- PWM integration
- PID Controls for the Command line quad
- Kalman filter testing
- Presentation

<u>Issues/Concerns</u>

- Need nylon screws to fasten IMU Went to lowes, everything was WAY too big -Luke
- Could use a hand-held multimeter
- Jones's PID code: what to do with the correction value that is the output of PID function?

Individual Accomplishments

Kevin Engel:

- Helped with gathering sensor data
- Began working on command line interface program

Nathan Ferris:

- Helped in the effort to collect sensor data.
- Sat down with bill and helped write code for camera/sensor matlab comparison
- Worked with Kelsey and Mike to get our webpage up and running from the free template I started.

William Franey:

- Finished Matlab function to generate artificial IMU data and made Kalman filter comparison
- Collected and plotted sensor data
- Wrote matlab functions to plot imu data and camera data and made initial Kalman filter comparison

Michael Johnson:

- Collected sensor data, and helped bill get it in the correct format.
- Got the website started with Nate and Kelsey
- Continued combining the simple programs we created into one (see issues/concerns).

Kelsey Moore:

- Started working on Website
- Looked into integrating PID's on the Command line interface
- Worked on the Wiki
- Went through ardupilot code

Lucas Mulkey:

- Created new hardware/software project to move forward with mounting the board
- Read through information Alex sent out in email. Trying to figure out what needs to be changed, could use further guidance/time to wrap my head around it

Aaron Peterson:

- Went through ardupilot code
- Helped to collect sensor data